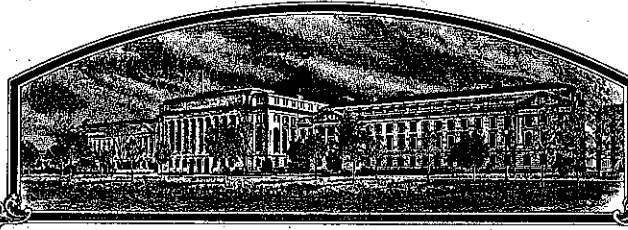


No.

9600265



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Agriculture and Agri-Food Canada

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THEREOF IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE SEED. (7 U.S.C. 2321 ET SEQ.)

DurumWheat

'Dressler'

In Testimony Whereof, I have herunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-eighth day of November in the year of our Lord one thousand nine hundred and ninety-seven.

Attest:

Marsha A. Stanton
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Samuel J. Phillips
Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

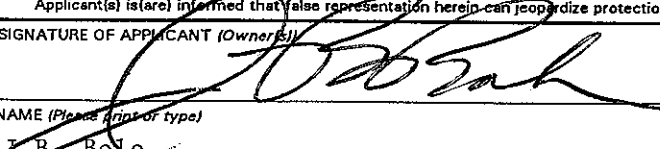
| | | | |
|---|----------------------------|---|---|
| 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) | | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER | 3. VARIETY NAME |
| Agriculture and Agri-Food Canada | | DT 476 | Dressler |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) | | 5. TELEPHONE (include area code) | FOR OFFICIAL USE ONLY PVPO NUMBER 9600265 DATE 5-23-96 FILING AND EXAMINATION FEE 2450 DATE 5-23-96 CERTIFICATION FEE 300.00 DATE 11/17/97 |
| Cereal Research Centre 195 Dafoe Road Winnipeg, Manitoba R3T 2M9 | | 204-983-0099 | |
| 6. FAX (include area code) | | | |
| 204-983-4604 | | | |
| 7. GENUS AND SPECIES NAME | 8. FAMILY NAME (Botanical) | | |
| Triticum durum | Gramineae | | |
| 9. CROP KIND NAME (Common name) | | | |
| Spring Durum Wheat | | | |
| 10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) | | | |
| Government of Canada | | | |
| 11. IF INCORPORATED, GIVE STATE OF INCORPORATION | | 12. DATE OF INCORPORATION | |
| | | | |
| 13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS | | | 14. TELEPHONE (include area code) |
| Agripro Seeds, Inc. Robert Bruns 806 N. Second Street P.O. Box 30 Berthoud, Colorado 80513 | | | 970-532-3721 |
| | | | 15. FAX (include area code) |
| | | | 970-532-2035 |
| 16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) | | | |
| a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO) | | | |
| 17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act?) | | | |
| <input checked="" type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input type="checkbox"/> NO (If "no," go to item 20) | | | |
| 18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? | | 19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? | |
| <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED | |
| 20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? | | | |
| <input type="checkbox"/> YES (If "yes," give names of countries and dates) <input checked="" type="checkbox"/> NO | | | |
| 21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. | | | |
| The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. | | | |
| Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties. | | | |
| SIGNATURE OF APPLICANT (Owner(s)) | | SIGNATURE OF APPLICANT (Owner(s)) | |
|  | | | |
| NAME (Please print or type) | | NAME (Please print or type) | |
| J.B. Boile | | | |
| CAPACITY OR TITLE | DATE | CAPACITY OR TITLE | DATE |
| Director | 96-07-11 | | |
| Cereal Research Centre, Winnipeg | | | |

Exhibit A.

Origin and Breeding History of Dressler

Dressler originated from the cross between Medora / Lloyd which was made by Agriculture and Agri-Food Canada, Cereal Research Centre (Agriculture Canada), Winnipeg in 1984. Medora is a conventional height Durum released by Agriculture Canada in 1982. Lloyd is a semidwarf height Durum released by North Dakota State University in 1983. The originating breeder is Dr. D. Leisle, Agriculture Canada, Winnipeg, MB.

The F₁ and F₃ and F₅ generations were grown in winter nurseries in Brawley, California, while the F₂ and F₄ generations were grown in rust nurseries at Glenlea, MB. Plant selections were made for stem and leaf rust resistance, maturity, height, lodging, and kernel smudge tolerance as appropriate using the pedigree method. Preliminary quality evaluation was begun in F₄. F₆ lines were grown at Glenlea and selected rows were bulked. Lines with acceptable kernel traits and quality were entered in replicated tests in 1988. The line designated RL 7229 was entered into the Durum Wheat "B" test in 1990, and was tested in the 1991 Durum Wheat Cooperative Test. Random head selections from an F₉ increase plot of RL 7229 were grown as F₁₀ Canadian Breeders Seed at Glenlea, MB in 1992.

RL 7229 was assigned the experimental designation DT 476 and has been tested in Agripro Breeding Nurseries in North Dakota and Minnesota from 1992-1995. DT 476 was also tested in the 1994 Uniform Regional Durum Nursery at thirteen locations in the US and Canada. A 0.2 acre Initial Seed increase (F₁₁) of DT 476 was grown at Berthoud, CO in 1993, using the Canadian Breeders Seed source, followed by a 4.5 acre "*United States*" Breeders Seed increase (F₁₂) at Berthoud, CO in 1994. DT 476 was assigned the official name of Dressler in 1995. A Foundation Seed increase (~15 acre) was grown under contract in Belfield, ND in 1995. Registered Seed stocks will be available to Agripro Associate growers in 1996.

Dressler has been uniform and stable since 1993. Less than 0.5% of the plants were rogued from the Breeder Seed field in 1994. Approximately 90% of the rogued variant plants consisted of slightly taller (5 to 15 cm) plants. Up to 0.5% variant plants may be encountered in subsequent generations.

Exhibit B.***Statement of Distinctness***

Dressler is most similar to the spring durum wheat 'Vic'. However, it can be easily distinguished by the following morphological characteristics:

- Dressler has an apiculate shoulder shape on the glume at maturity (Berthoud, CO. 1993, 1994 and 1995). Vic is described as having an elevated shoulder on the glume at maturity (Crop Science Registration No. 638; Vol. 20).
- Dressler has a middeep seed crease (Berthoud, CO 1993, 1994 and 1995). Vic is described as having a shallow seed crease depth (Crop Science Registration No. 638; Vol. 20).

OBJECTIVE DESCRIPTION OF VARIETY
 WHEAT (*Triticum* Spp.)

INSTRUCTIONS: See Reverse.

| | |
|---|---|
| NAME OF APPLICANT(S) Agriculture and Agri-Food Canada | FOR OFFICIAL USE ONLY |
| ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) Winnipeg Research Station 195 Dafoe Road Winnipeg, Manitoba R3T 2M9 | PVP NUMBER 9600265 |
| | VARIETY NAME OR TEMPORARY DESIGNATION Dressler |

Place the appropriate number that describes the varietal character of this variety in the boxes below.
 Place a zero in the first box (e.g. or) when number is either 99 or less or 9 or less.

1. KIND:

2 1 = COMMON 2 = DURUM 3 = CLUB 4 = OTHER (SPECIFY) _____

2. VERNALIZATION:

1 1 = SPRING 2 = WINTER 3 = OTHER (SPECIFY) _____

3. COLEOPTILE ANTHOCYANIN:

1 1 = ABSENT 2 = PRESENT

4. JUVENILE PLANT GROWTH:

3 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

5. PLANT COLOR (boot stage):

3 1 = YELLOW-GREEN 2 = GREEN 3 = BLUE-GREEN

6. FLAG LEAF (boot stage):

1 1 = ERECT 2 = RECURVED

2 1 = NOT TWISTED 2 = TWISTED

7. EAR EMERGENCE:

*Equal to Vic
 NUMBER OF DAYS EARLIER THAN _____

NUMBER OF DAYS LATER THAN _____

8. ANTHOR COLOR:

1 1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns) 95 cm

cm. TALLER THAN _____

0 4 cm. SHORTER THAN Vic _____

* Relative to a PVP-approved commercial variety grown in the same trial.

9600265

13. SEED:

A. SHAPE

☐ 3

1 = OVATE 2 = OVAL 3 = ELLIPTICAL

B. CHEEK

☐ 2

1 = ROUNDED 2 = ANGULAR

C. BRUSH

☐ 1

1 = SHORT 2 = MEDIUM 3 = LONG

☐ 1

1 = NOT COLLARED 2 = COLLARED

D. CREASE

☐ 21 = WIDTH 60% OR LESS OF KERNEL
2 = WIDTH 80% OR LESS OF KERNEL
3 = WIDTH NEARLY AS WIDE AS KERNEL☐ 21 = DEPTH 20% OR LESS OF KERNEL
2 = DEPTH 35% OR LESS OF KERNEL
3 = DEPTH 50% OR LESS OF KERNEL

E. COLOR

☐ 2

1 = WHITE 2 = AMBER 3 = RED 4 = OTHER (specify) _____

F. TEXTURE

☐ 1

1 = HARD 2 = SOFT

G. PHENOL REACTION (see instructions)

☐ ---1 = IVORY 2 = FAWN 3 = LIGHT BROWN
4 = DARK BROWN 5 = BLACK

14. DISEASE: (0 = NOT TESTED; 1 = SUSCEPTIBLE; 2 = RESISTANT)

☐ 0

STEM RUST

(Res. genes) _____

☐ 0

STRIPE RUST

(Res. genes) _____

☐ 0

MILDEW

(Res. genes) _____

☐ 0*Septoria nodorum*

(Res. genes) _____

☐ 0

BYDV

(Res. genes) _____

☐ 0

SBMV

(Res. genes) _____

☐

OTHER _____

☐ 0

LEAF RUST

(Res. genes) _____

☐ 0

LOOSE SMUT

(Res. genes) _____

☐ 0

BUNT

(Res. genes) _____

☐ 0*Septoria tritici*

(Res. genes) _____

☐ 0

WSMV

(Res. genes) _____

☐ 0

SSMV

(Res. genes) _____

15. INSECT: (0 = NOT TESTED; 1 = SUSCEPTIBLE; 2 = RESISTANT)

9600265

☐

HESSIAN FLY (Res. genes) _____

☐

STEM SAWFLY (Res. genes) _____

☐

CEREAL LEAF BEETLE (Res. genes) _____

☐

APHIDS (Res. genes) _____

☐

GREENBUG (Res. genes) _____

☐

RUSSIAN APHID (Res. genes) _____

☐

OTHER (specify) _____

Exhibit D.

Additional Description of Dressler

Dressler is a conventional height hard amber durum wheat adapted to the traditional Durum areas of North Dakota. Dressler originated from the cross between Medora / Lloyd which was made by Agriculture and Agri-Food Canada, Cereal Research Centre (Agriculture Canada), Winnipeg in 1984. Medora is a conventional height Durum released by Agriculture Canada in 1982. Lloyd is a ^{Phalaris} semidwarf height Durum released by North ^{Dakota} America State University in 1983. ^{AAA} The originating breeder is Dr. D. Leisle, Agriculture Canada, Winnipeg, MB. ^{21 Oct 1997}

Juvenile growth habit is erect. Plant color at boot stage is blue-green. The flag leaf is erect and twisted. Auricle anthocyanin is present and auricle hairs are absent. Waxy bloom is present on the stem, head and flag leaf sheath. The head is strap, awned and middense. Spike position at maturity is erect. Neck is snakey or flexuous. Glumes are long and midwide with apiculate shoulders and acuminate beaks. Seed shape is elliptical. Seed brush is short in length and midsized in size. Seed checks are angular. Seed crease is midwide and middeep.

Agripro Seeds, Inc. maintains seed stock and certified classes of foundation, registered and certified. Registered seed stocks of Dressler will be available in the Spring of 1996. Certified acreage is not to be published by AOSCA and certifying agencies.

Exhibit E.

Statement on the Basis of Applicant's Ownership

The variety for which Plant Variety Protection is hereby sought was developed by Dr. D. Leisle an employee of Agriculture and Agri-Food Canada, Winnipeg, MB. By agreement between Dr. Leisle and Agriculture Canada, all rights to Dressler were assigned to Agriculture Canada. Agriculture Canada and Agripro Seeds, Inc. have entered into an agreement that grants Agripro Seeds, Inc. exclusive rights to produce, market, and sell Dressler in the United States.

Exhibit F.***Quality And Agronomic Data***

| | |
|----------------------|---------|
| Quality Data. | 1. |
| Agronomic Data. | 2. & 3. |

9600265

YEAR: 1995

ACRIPRO
DURUM QUALITY

| YR | VARIETY | LOC | TEST WT. lbs/bu | R | SEMOL PROT. 14%mb | R | B-CAROT. ppm | R | MIX TOL. | NORRIS HARD | OVERALL RATING |
|----|----------|-----|-----------------------|-----|-------------------------|-----|-----------------|-----|-------------|----------------|-------------------|
| 93 | DRESSLER | BR | 61.5 | 3 | 13.9 | 3 | 6.0 | 5 | 5 | 224 | 29 |
| 92 | DRESSLER | MW | 59.5 | 2 | 13.0 | 2 | 5.7 | 5 | 4 | 211 | 24 |
| | AVERAGE | | 60.5 | 2.5 | 13.5 | 2.5 | 5.9 | 5 | 4.5 | 218 | 26 |
| 93 | VIC | BR | 61.6 | 3 | 14.3 | 2 | 6.0 | 5 | 5 | 222 | 27 |
| 92 | VIC | MW | 60.8 | 1 | 12.5 | 3 | 6.2 | 4 | 3 | 214 | 21 |
| | AVERAGE | | 61.2 | 2 | 13.4 | 2.5 | 6.1 | 4.5 | 4 | 218 | 24 |
| 93 | CANDO | BR | 58.9 | 6 | 11.5 | 6 | 6.3 | 4 | 7 | 213 | 40 |
| 92 | CANDO | MW | 59.1 | 3 | 10.6 | 7 | 5.4 | 5 | 8 | 195 | 43 |
| | AVERAGE | | 59.3 | 4.5 | 11.1 | 6.5 | 5.9 | 4.5 | 7.5 | 204 | 42 |

QUALITY TRAITS: B-CAROTENE-SEMOLINA COLOR NORRIS-HARD-HARDNESS SCORE ON SEMOLINA

MIX TOL-MIXOGRAM TOLERANCE

RATINGS: 1-2=EXCELLENT 3-4=VERY GOOD 5=ACCEPTABLE 6-7=QUESTIONABLE 8-9=UNACCEPTABLE

1995 Agripuro Seeds Agronomic Notes

| Variety | FD1 | FD2 | FD1 | FD | HD | HD | MT | SC2 | SC1 | SC1 | SC | HT | WO | WO |
|----------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|
| | GF | GF | CS | Ave. | BR | GF | GF | GF | PR | CS | Ave. | PR | MU | WP |
| Vic | 6 | 4 | 5.7 | 5.2 | 5 | 7 | 5 | 6 | 5 | 4 | 5 | 105 | 6 | 7 |
| Munich | 3 | 4 | 4.3 | 3.8 | 6 | 6 | 4 | 6 | 5 | 4 | 5 | 88 | 3 | 5 |
| Dressler | 2 | 4 | 4.3 | 3.4 | 5 | 5 | 6 | 7 | 4 | 6 | 5.7 | 100 | 4 | 5 |
| Average | 3.7 | 4.0 | 4.8 | 4.1 | 5.3 | 6.0 | 5.0 | 6.3 | 4.7 | 4.7 | 5.2 | 97.7 | 4.3 | 5.7 |

Notes:

FD1=Early Foliar Disease

FD2=Later Foliar Disease Note

SC2=Later Scab Note

SC1=Early Scab Note

HD=Heading

MT=Relative Maturity

HT=Height(cm)

WO=Breeder's Worth Note

Locations:

GF=Fisher, MN

BR=Berthoud, CO

WP=Brekenridge, MN

PR=Park River, ND

MU=Munich, ND

CS=Casselton, ND

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Comparison of Dressler vs Vic

| Variety | Height (cm) | Heading (days) | Data Source |
|-----------------|---------------------------------|-----------------------|--------------------|
| Dressler | 93.9 (<i>3.5 cm shorter</i>) | 60.5 | 1994 URDN |
| Vic | 97.4 | 60.2 | (11 locations) |
| Dressler | 100.0 (<i>4.5 cm shorter</i>) | equal | 1995 AgriPro |
| Vic | 104.5 Ave. of 4 reps | equal | (Park River, ND) |